### **Committee Workshop on**

# The Water-Energy Relationship Staff Paper and on

# Potential Changes in Hydropower Production from Global Climate Change in California and the Western United States Contractor Report

June 21, 2005

### **Workshop Questions**

#### **Priority Questions**

- 1. What do you recommend as priority policy actions, new initiatives, or programs to address the issues raised in these reports?
- 2. Do you have any comments, suggested revisions, or questions about these reports?

#### Other Questions

#### **Water Energy Relationship Questions**

- 1. Are the energy requirements (electricity, natural gas, petroleum) for water storage, statewide or regional conveyance, supply treatment, local delivery, primary end-use, and wastewater treatment and disposal adequately described? If not, what is missing?
- 2. Are the effects on electricity supply and/or demand caused by changes in hydrologic and/or climatic conditions (i.e., wet years vs. critical dry years) shown in the report additive? If not, what are the mitigating factors?
- 3. Does the report properly portray the context of how California's water development, treatment, and use will change in the future and how these changes might affect energy demand?
- 4. What needs to be done to increase the coordination of water, waste water and energy agencies and utilities (state, federal and local) to address the issues raised in this report? What opportunities for collaboration currently exist?
- 5. What actions can be taken to improve the effectiveness of existing water and energy sector programs, such as conservation, efficiency and forecasting programs, as well as to assist water management agencies to use energy more efficiently or aid in fostering more efficient and effective use of California's water resources?

## **Hydro Climate Change Questions**

- 1. How will climate change affect those hydrologic parameters critical to hydropower production?
- 2. Is the state of the science sufficient to predict with any level of certainty how hydropower production may change in the future?
- 3. Are there key watersheds that are especially important in terms of hydropower generation, and also especially vulnerable to climate change effects?
- 4. Since California depends on hydropower imports from both the Pacific Northwest and the Colorado River Basin, are the effects of climate change the same in those areas, and how could climate change impact the delivery of hydropower to California?
- 5. Would climate change increase the "competition" between hydropower production and flood control and water supply operations?
- 6. Are entities responsible for the planning, operating, and delivery of hydropower incorporating climate change effects in current or future plans?
- 7. Would sea level rise and increases in storm intensity and/or frequency affect coastal power plants?